THE UNIVERSITY OF CHICAGO

ROUND TABLE

THE AIRPLANE AND THE FUTURE

A Radio Discussion by WALDEMAR KAEMPFFERT
WILLIAM PATTERSON *and* LOUIS WIRTH

Twelfth Anniversary

470TH BROADCAST IN COOPERATION WITH
THE NATIONAL BROADCASTING COMPANY

NUMBER 258 * * FEBRUARY 28, 1943

Around the Round Table . . . .

WALDEMAR KAEMPFFERT, science editor of the *New York Times*, is both a scientist and a lawyer. He received his B.S. degree from the City College of New York, his LL.B. degree from New York University, and his D.Sc. from Clarkson Polytechnical Institute. He was admitted to the bar in 1903 and registered as a patent attorney. Dr. Kaempffert was an editor of the magazine *Scientific American* for many years and also has served as editor of *Popular Science Monthly*. Since 1927 he has been science editor of the *New York Times* with the exception of the years 1928–31, when he acted as director of the Museum of Science and Industry in Chicago. He is the author of *History of Astronomy* (1910), *New Art of Flying* (1911), and *Science Today and Tomorrow* (1939). He has also translated *Gas Engines and Producer-Gas Plants* (by Rudolphe E. Mathot) (1905) and is a regular contributor to scientific and engineering periodicals.

WILLIAM A. PATTERSON, president of United Air Lines, was associated with a San Francisco banking firm until he entered the aviation industry in 1928. Since then he has been associated with the Boeing Airplane Company and Boeing Air Transport, the Pacific Air Transport, National Air Transport, and Varney Lines. Since 1934 he has served as president of United Air Lines. Mr. Patterson is also a director of the Air Transport Association of America.

LOUIS WIRTH, professor of sociology at the University of Chicago, received his Ph.B., M.A., and Ph.D. degrees at the University of Chicago. Professor Wirth has done social work in Chicago and served as director of the delinquent boys' division of the Bureau of Personal Services before he came to the University of Chicago to teach and later to become assistant dean of the social science division. He was a research fellow in Europe under the Social Science Research Council in1930–31. Since 1935 Professor Wirth has served as a consultant for the National Resources Planning Board. He is the author of *The City* (with R. E. Park and others) (1925), *The Ghetto* (1928), *Our Cities: Their Role in the National Economy* (with others) (1937), *Urban Government* (with others) (1938), and *Urban Planning and Land Policies* (with others) (1939), and is the editor of *Contemporary Social Problems* (1939) and *1126: A Decade of Social Science Research* (1940). He is an associate editor of the *American Journal of Sociology* and a regular contributor of articles to various journals on sociology and social research.

THE AIRPLANE AND THE FUTURE

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MR. WIRTH: At the time when the three of us were born there were no airplanes. In a single generation the airplane has developed from a visionary dream to a cumbersome gadget, to one of our greatest industries and one upon which our survival may depend. Today, more than ever, machine- and air-minded Americans are speculating about the airplane in tomorrow's world.

MR. PATTERSON: I, of course, being a practical man in the air-transport business, am inclined to feel that there are some exaggerated statements being made, and I take advantage of the opportunity to somewhat reshape our thinking on this subject.

MR. KAEMPFFERT: I'm a sort of a social historian myself, and I'm inclined to look more toward the immediate and remote future than you are. But it seems to me that when there is a transatlantic record now of six and a half hours for the airplane, and when in forty-eight hours one can reach any point on earth in an airplane, and when a week end in London is no longer a wild dream, and when India is closer to the United States than Boston was to Washington in stagecoach days, we're justified in doing some dreaming. What do you think about that?

MR. PATTERSON: I thoroughly agree with you that the scope and the effectiveness and the potentialities of the airplane are extremely far-reaching. Without question, it's going to revolutionize many social and economic habits and policies that we have followed in the past. But then, again, there are certain limitations.

MR. WIRTH: To you, then, Mr. Patterson, as the man in the industry, and to you, Kaempffert, as the man who peers from your

lookout tower in the *New York Times* building on what's going on in science in the laboratories, let's ask what the new plane will be like in size and power and speed and safety.

MR. PATTERSON: There are many questions being raised as to the size and speed of airplanes today. In my opinion, there is no limit on size, and there is still a great deal of margin for speed. But, after all, we're going finally to develop a size of airplane or speed that's influenced by demand.

MR. WIRTH: Kaempffert, I notice that in your forthcoming "Public Affairs Pamphlet" on the airplane in the future world you have made some speculations about what the new plane will look like.[1]

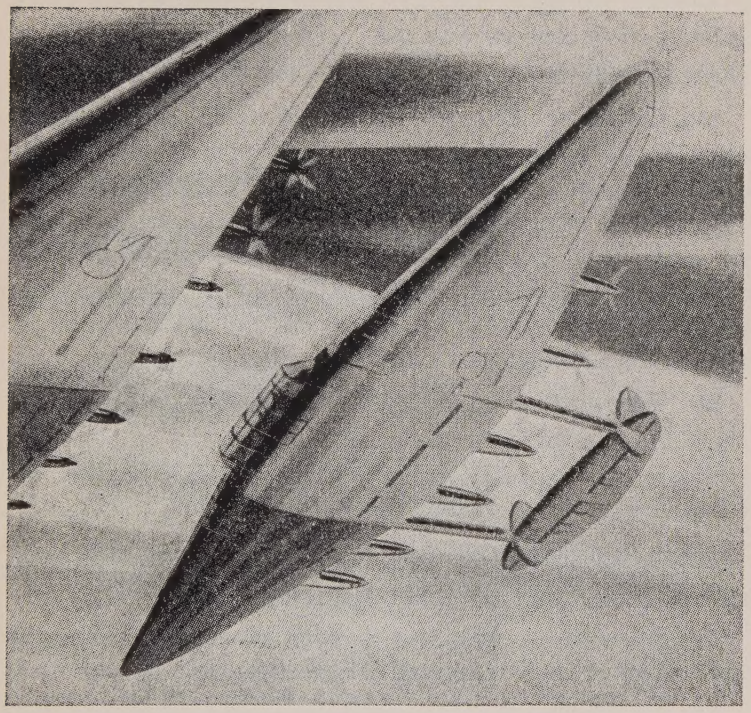
MR. KAEMPFFERT: I think that it will look very much like the plane that we have today. It will be larger, more commodious, and faster. Nevertheless, what I think interests me more is what it can do. After all, when one thinks that the *Queen Mary* can carry only ninety thousand passengers in forty-eight possible voyages annually (and that allows no time for dry dock at all) and when four one-hundred-and-fifty-passenger planes can carry two hundred thousand passengers with only two planes flying each day in each direction—that's about all the passengers that were carried by steamers across the ocean between 1928 and 1938—then, it seems to me, we are justified in saying almost anything about the future.

MR. WIRTH: I take it that this is not mere speculation. We are resting upon the facts that we have achieved now. You are merely

[1] The "Public Affairs Pamphlet," *The Airplane and Tomorrow's World*, written by Waldemar Kaempffert, will be published and released for sale on May 1, 1943.

The University of Chicago ROUND TABLE. *Published weekly. 10 cents a copy; five copies, 25 cents; full-year subscription, 52 issues, two dollars. Published by the University of Chicago, Chicago, Illinois. Entered as second-class matter January 3, 1939, at the post office at Chicago, Illinois, under the Act of March 3, 1879.*

THE PLANE OF THE FUTURE?



Courtesy "Air Progress Magazine"

drawing upon the experience that we have already attained with the airplane upon which to draw the picture of tomorrow.

MR. KAEMPFFERT: Correct.

MR. PATTERSON: Of course, we've got the cost of tomorrow's plane and air travel generally, which, in my opinion, is going to affect, to some extent, the future travel by air. Kaempffert has mentioned the volume of business across the oceans prior to the war. To that we must add the additional business that the airplane is going to attract. Of course, one influence there is going to be the fare and the economy that can be developed.

MR. KAEMPFFERT: You gave me some interesting figures on cost. I remember paying on the *Queen Mary* three hundred and thirty dollars for first-class passage, and I paid three hundred dollars on the *Normandie.* I'd like to hear what you have to say on costs by air.

MR. PATTERSON: Let's take the domestic fares today, which are approximately five cents a mile. You can travel two thousand miles over the domestic air routes of this country for one hundred dollars. The operation of an airplane over an ocean is not going to be more expensive. There is a possibility of its being less expensive. I see no reason why the fare across the Atlantic or across the Pacific shouldn't be at the rate of five cents a mile, at least to start with, and there is a possibility of even further economy.

MR. WIRTH: That means that you not merely have costs that might compete with other means of transportation but that you also have greater speed. As I understand it, you also give us a chicken dinner on top of all of that.

MR. PATTERSON: Yes. We give you a chicken dinner and much personal service.

MR. KAEMPFFERT: Why, yes, I expect to spend a week end in London, let us say, in 1945, and think nothing of it.

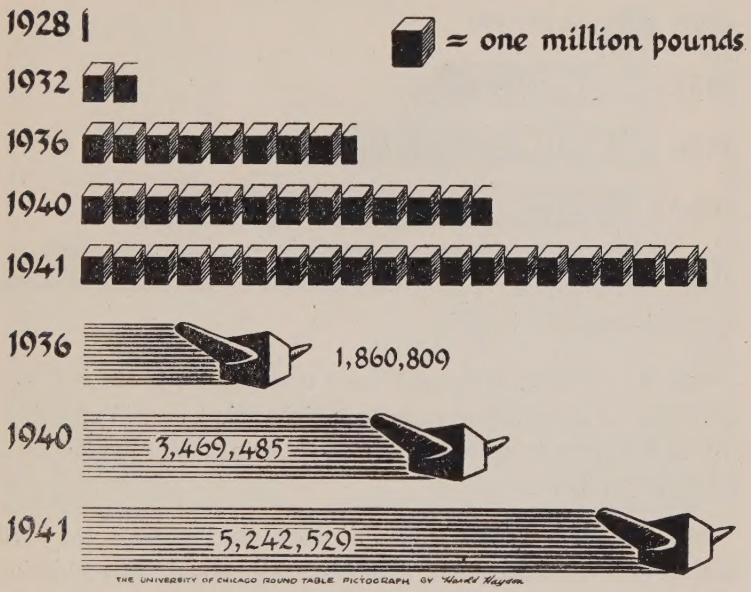
MR. WIRTH: But the passenger traffic won't be all of it, will it? After all, there is the tremendous field of cargo transport.

MR. PATTERSON: There are certain limitations in that field. I think that the major activity of the air lines, whether they be international or domestic—the greatest impact—is going to come from the transport of people.

There will be, of course, valuable cargoes and mail carried. The majority of your first-class mail will be traveled by air.

MR. KAEMPFFERT: However, don't you think that there is still a tremendous amount of undeveloped aerial express business? For example, I read that one of the great railways of the country made a study of this, and they figured out that there are twenty-one

EXPRESS AND FREIGHT CARRIED ON SCHEDULED AIR LINES*



* The first five rows of figures represent foreign, domestic, and territorial service in pounds. The last three rows are for domestic only and are expressed in ton-miles. Civil Aeronautics Authority.

million tons yearly that could be carried by air express. That's two thousand times more than all the air-express business that our air lines had in 1941.[2]

MR. PATTERSON: I'd like to emphasize that in another way. Today we carry 2/100 of 1 per cent of the cargo and people carried by surface transportation.

MR. WIRTH: What do you expect to carry when the war is over?

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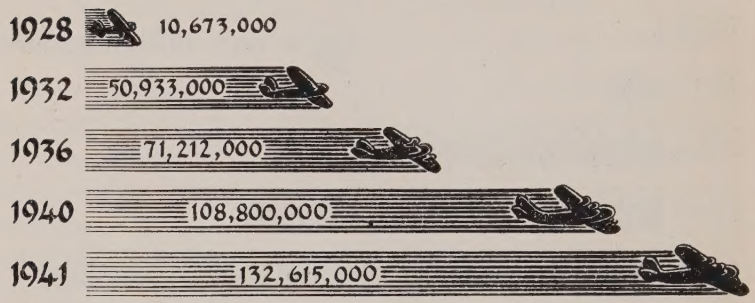
[2] In 1941, according to the Civil Aeronautics Authority, the express and freight carried by airplanes on scheduled air lines was 19,258,592 pounds, or about 10,000 tons. This includes foreign, domestic, and territorial express. See pictograph above.

MILES FLOWN ON SCHEDULED AIR LINES*



* Civil Aeronautics Authority.

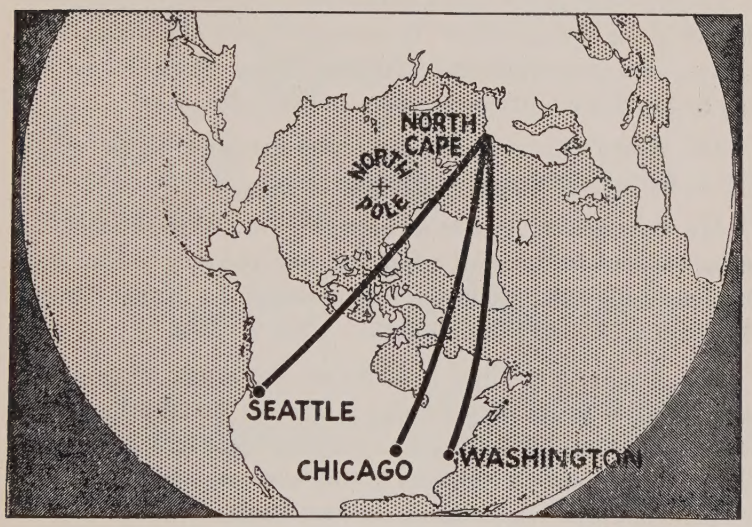
MR. PATTERSON: We expect—and there, again, is where I take advantage of every opportunity to explain—that we will probably, within five years, increase our volume of business twenty-nine times its present volume.

MR. WIRTH: I noticed in reading one of the reports of the Civil Aeronautics Administration, which is, I understand, the regulating authority for the aviation industry, that in 1941, before we actually got into the war—in that one single year—there was a 60 per cent increase in the number of certified civilian pilots; a 43 per cent rise in the number of certified planes; and a 12 per cent increase in the civil airports and landing areas. That shows that at the beginning of the war the industry was already expanding by leaps and bounds.

MR. PATTERSON: Let's take the one figure you've submitted there—the percentage increase in the number of pilots. The actual number in that particular case was about sixteen thousand. When we stop to consider that now we're training two hundred and fifty thousand men in this war to fly, there's a percentage for a potential change following the war.

MR. WIRTH: I think that we might consider, then, what the chances are of converting this military industry, which it is for the

FROM NORWAY TO THE UNITED STATES*



Courtesy Consolidated Aircraft Corporation

* A German bombing squadron based in Norway could, by flying approximately the same distance, bomb Washington, Chicago, or Seattle.

time being, to a civilian industry when the war is over. How about it?

MR. KAEMPFFERT: The military plane is not something that you can readily adapt for passenger use. The man who flies that has to be a much more highly trained person. It's almost like an aerial acrobatics. On the other hand, I do think that the passenger plane can be readily converted into a military plane, not with the highest efficiency, but as an expedient for something immediately useful.

MR. WIRTH: Patterson, are you going to buy up all the military planes and turn them into transport planes?

MR. PATTERSON: I believe that the greatest mistake this industry could ever make, following this war, would be to attempt to

convert military planes to commercial planes. Let's stop to go back to compare the original objective in the design and construction of a military plane and a commercial plane. The military plane's objective is one of destruction. It must have great maneuverability; it must have great speed and great firing power. Safety is a secondary factor. It's an extremely tricky and sensitive plane.

MR. WIRTH: You certainly don't need the armor on the civilian planes for protection against gunfire.

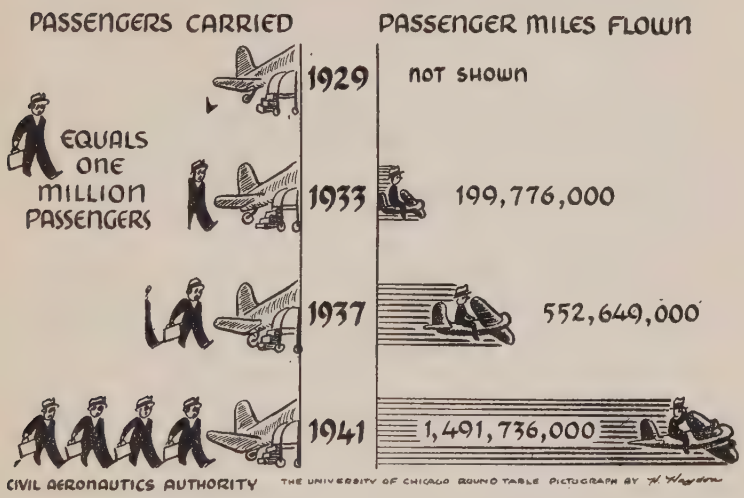
MR. PATTERSON: At least we hope not. But, when we come to a commercial plane, we want one of stability, one easy to handle. It minimizes the failures and the weaknesses of the human element. We want safety; we want comfort.

MR. KAEMPFFERT: But, nevertheless, Patterson, it's a strange thing that at every disarmament conference that has been held since 1919 it has been decided and agreed upon that, unless that disarmament meant a complete control over commercial aviation, it would not last. Furthermore, our own President, when the Civil Aeronautics Board was created, wrote a letter in which he said that civil aviation is the backlog of national defense aviation. The two are tied together in a military way.[3]

MR. PATTERSON: I believe that they are not physically tied to-

[3] "At the outbreak of war there were two international air conventions in force for the regulation of international aviation—the Paris Convention of 1919 and the Pan-American Havana Convention of 1928. In both conventions private flying was left free, but the establishment of regular international air transport services was subject to the consent of the States flown over. Over most of the world these services have come into operation as the result of hard bargaining between pairs of Governments conducted with strict regard to reciprocity. For Europe alone about a hundred reciprocity agreements had been concluded. Most of the Latin American countries, however, were not in a position to conclude reciprocity agreements, since they had not made preparations for running international services to the U.S.A., Europe, or other parts of the world; and consequently the foreign air companies that have entered Latin America have done so under concessions negotiated directly between the Governments and companies . . . ." ("Air Transport and the Future," *Bulletin of International News*, Vol. XIX, No. 26 [December 26, 1942]).

PASSENGER SERVICE ON SCHEDULED AIR LINES



gether in any way. The research that goes on in commercial development has military application, and the reverse is true; but I don't believe that anyone intended that our military planes should be used as our commercial planes. I question your remark, Kaempffert, that we can convert commercial planes to military. I know of only a single plane that was converted, and it was done only after months and months of redesign and manufacture.

MR. WIRTH: Even though we won't convert the actual planes from wartime planes to peacetime planes, we will have created a new industry—or a tremendously expanded industry. We'll have thousands of motors—and they may be used—and we will have plants to manufacture planes. Therefore, I think that we ought to look at the airplane in tomorrow's world in the light of the facilities that we're going to have available when the war is over.

MR. PATTERSON: There, again, is one reason why I think it would be a mistake to convert to civilian use planes of military

use that are now in military use. We want to put these great factories and these great facilities to work following this war developing the finest thing that we can for the further development of our business.

MR. WIRTH: One thing about the airplane industry that I've noted is that apparently almost from the very beginning they have been opening up one another's secrets and exchanging patents. There wasn't really very much in the way of holding back in a monopolistic way.

MR. PATTERSON: The interchange and pooling of patents among the manufacturers in this country is probably one of the most outstanding cooperative and constructive things done in any industry. There is a complete pooling and interchange.

MR. KAEMPFFERT: Nevertheless, Patterson, there has been a good deal of secrecy, particularly in governmental research, on engines, wing forms, speeds, too, as far as these are concerned with war, and they hug these secrets to their bosoms. I will grant you that these are not fundamental discoveries, but they are the tremendous trifles that spell efficiency.

MR. WIRTH: You mean those little things that start big wars.

MR. KAEMPFFERT: That is the sort of thing I mean, yes.

MR. PATTERSON: Of course, you're not critical of our existing domestic arrangement in the cooperation between carriers. You're referring to the international scene.

MR. KAEMPFFERT: I am.

MR. PATTERSON: Don't you feel that possibly one reason why our international developments are guarded is for military reasons?

MR. KAEMPFFERT: It's largely that, but, of course, commercial firms, too, like to have a monopoly as far as they can. But your industry has been a particularly fine example of what cooperation can do, and I should like to see that extended internationally.

Mr. Wirth: Let us consider, then, this question of competition within the industry. Doesn't it seem to be a fact that your industry has grown up from the very beginning under governmental sponsorship and under governmental control?

Mr. Patterson: Yes, and under the competitive system. I would say that it's extremely fortunate for us, although we possibly didn't like it at the time, that we were regulated as early in our development as we were. With so many new ideas coming in, the competitive situation that might result would be chaos unless there was some regulation.

Mr. Wirth: Isn't it a rather favorable sign, Kaempffert, when a businessman like Patterson tells us that he is glad he has been regulated by the government from the very beginning?

Mr. Kaempffert: It's an extraordinary phenomenon to me.

Mr. Patterson: In the final analysis, we always like the thing that is good for us.

Mr. Wirth: How do you think that you will stand after the war is over in competition with the railroads and steamship lines, Patterson?

Mr. Patterson: I think that it may be difficult to impress a railroad man or a steamship man that we are going to create more business for him than we will ever take away. We're not going to be the competitor of the railroads that some enthusiasts have prophesied.

Let me give you an example in the steamship business. Let's, for the sake of presenting an example here, say that we wanted to move sixty-four hundred tons of goods from San Francisco to Australia—a distance of approximately seventy-five hundred miles. One cargo vessel will move that cargo to Australia in thirty days.

Mr. Wirth: At what cost?

Mr. Patterson: At a cost of one hundred and twenty thousand dollars. But let's assume that we want to move the same volume

of cargo in thirty days by air. It would require one hundred and forty-four airplanes to do the job. In addition, it would require three tankers to supply the gasoline at the various points where the planes would have to replenish their supply, and the cost of operating those one hundred and forty-four airplanes and all the incidental costs in connection with their operation would be twenty-five million dollars.

MR. WIRTH: As compared with one hundred and twenty thousand. It looks to me as though the airplane has already eaten into the business of some of the railroads and some of the steamship companies.

MR. PATTERSON: Let's take that, Wirth. I think that I can give you a figure that'll impress you on that particular point. The air lines of the country today have 2/100 of 1 per cent of the transportation carried by surface.

MR. WIRTH: How many planes did you have in the industry in peacetime?

MR. PATTERSON: In peacetime we had a maximum number of three hundred and fifty-two airplanes, and we have less than that number now.

MR. WIRTH: You mean in the whole industry in America?

MR. PATTERSON: In the entire industry.

MR. WIRTH: That's a lot of noise for a very few planes, Patterson.

MR. PATTERSON: I think that as far as the air-transport industry is concerned they did a grand job with the few tools they had to work with.

MR. KAEMPFFERT: Nevertheless, Patterson, you're going to increase enormously beyond that after the war. Our production facilities should be used to the utmost, even after the war, in supplying

this tremendous domestic and international demand for transportation.

MR. PATTERSON: Yes, but there, again, is the question in my mind as to how far we're going to go. I estimate that within five or seven years following this war we might increase our volume of business to where we will have two-thirds of the first-class Pullman business, possibly one-half of all first-class mail, and possibly 25 per cent of the express.

MR. KAEMPFFERT: Yes, but don't you think, Patterson, that we're going to have a tremendous growth in airplane traffic, far more than that, and that we'll need thousands of planes after the war and that these factories will be kept busy turning them out?

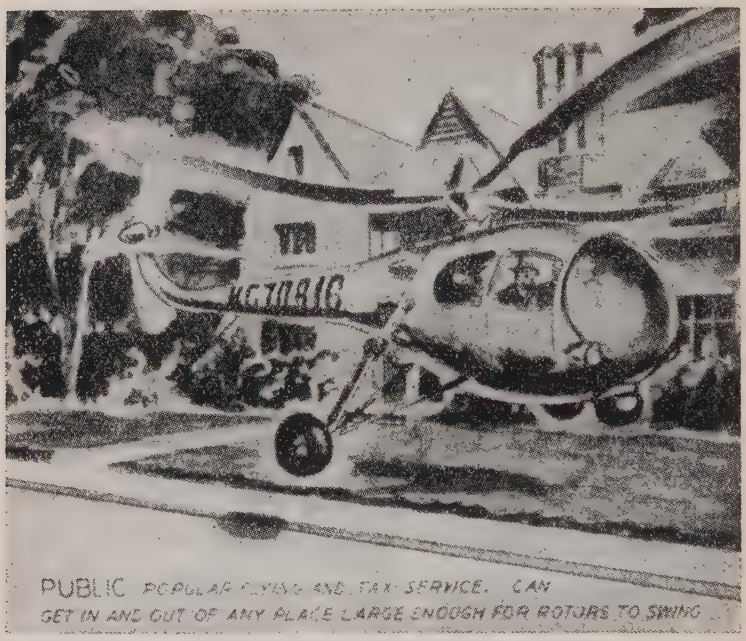
MR. WIRTH: Kaempffert, you don't mean thousands of planes for cargo and passenger traffic on a mass scale?

MR. KAEMPFFERT: No, I'm including the whole thing—that is, cargo, transportation, and the family planes—every possible type that you can think of.

MR. PATTERSON: I can speak for the transport industry. I would forecast conservatively that we could use fifty-two hundred and fifty planes, as compared to three hundred and fifty prior to the war. That's a tremendous development, I believe you'll agree.

MR. WIRTH: I suspect that a great many people, and a great many of our listeners to this University of Chicago ROUND TABLE, feel that the future of their children, and perhaps their own fortune, lies with the aviation industry. I suspect, furthermore, that a great many of them are basing the hope on the development of the family-airplane "flivver." What are the chances for that really coming into being?

MR. PATTERSON: There, again, there is compromise between the enthusiasts and my own forecast. There is no question in my mind that the privately owned airplane is going to find its place, very definitely. We can't train two hundred and fifty thousand men in



Courtesy "Air Progress Magazine"

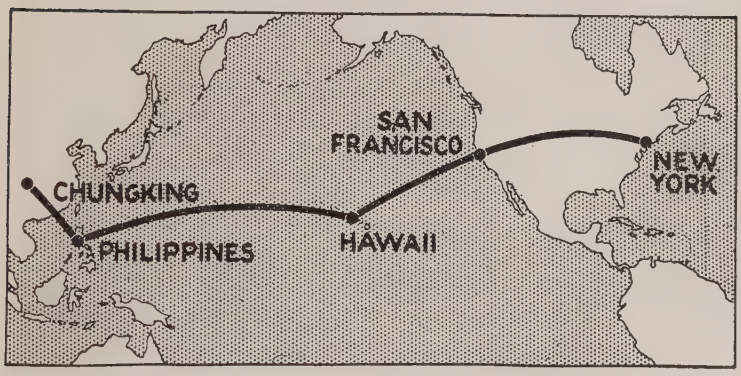
this war to fly airplanes and not have them use that facility in peacetime.

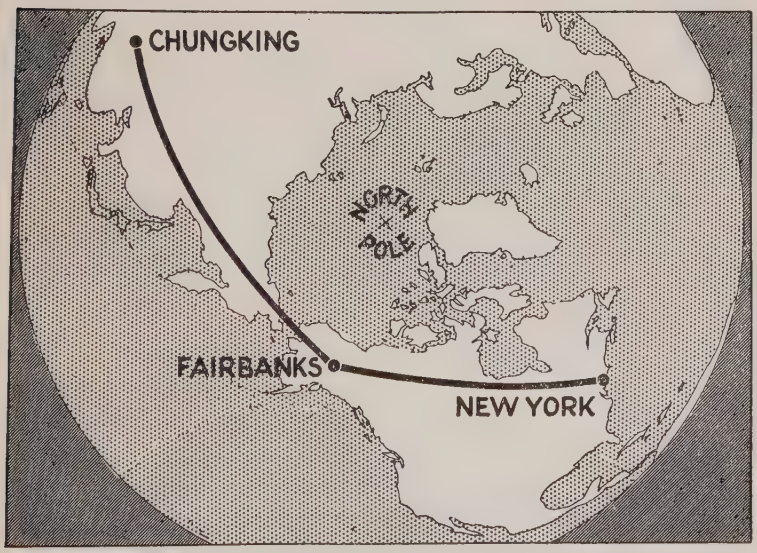
MR. WIRTH: Consider also all the hundreds of thousands of boys in the schools who are building their own model planes.

MR. PATTERSON: We have a group of people today reaching their maturity—a generation reaching maturity—that are growing up with one idea—to own or to fly in an airplane.

MR. KAEMPFFERT: Nevertheless, I think that the possibilities are simply unbounded—that we can't really foresee the number of airplanes that we're going to have even fifteen years from now. The demand will be terrific.

NEW YORK TO CHUNGKING*





Courtesy Consolidated Aircraft Corporation

* It takes at least a month by train and ship to go from New York to Chungking, China. The route, which is about 11,300 miles, is shown in the top map. By long-range plane, via Fairbanks, Alaska, Chungking lies only 7,500 miles, or 38 hours, from New York.

Mr. Wirth: But will every family have its plane in its own garage, as we now have an automobile in our garage? That's really the question that people are asking.

Mr. Kaempffert: I doubt if we'll have it in our own garage, but we're going to have them at the city airport. We're going to go out there, take the machine out, and fly it. That's going to be our garage.

Mr. Patterson: Kaempffert, I agree with the most optimistic statements. It's a question of timing. I believe that if all of us could come back and peek in on this world many generations to come, we'll see the world that you may visualize. I don't think that there is much disagreement about that. I really think it will come, but I doubt if it comes in our generation.

Mr. Wirth: There are some very serious technical obstacles as yet. For instance, what would the auto have amounted to if one couldn't get into it except at an "auto port"? Or if one couldn't slow it down to less than seventy miles an hour?

It seems to me, as I've been looking over the American scene, that people are wondering whether their cities are going to have to be rebuilt to respond to this airplane that's going to become a means of mass transportation.

Mr. Kaempffert: The cities will have to be rebuilt. I grant you that a great city like New York or Chicago or Paris or London can't be rebuilt so easily. On the other hand, the small town, which for economic reasons is bound to become an international airport, is going to have an airport which will be the center of community activities—just as the old city square was in medieval times. That will be the heart of the city, with hotels and business offices around it. That's where the life of the town will be concentrated.

Mr. Patterson: As I say, I think that much of that development will take place and that it will take place around airports. I refer particularly to some of the statements being made that we're

going to use some of the latest developments—such as the helicopter.

MR. WIRTH: Patterson, is that the airplane with the windmill gadget on top of it that flies straight up and down?

MR. PATTERSON: Straight up, or backward and forward.

MR. WIRTH: It can land on a rooftop?

MR. PATTERSON: Yes. But some people have taken that development, which is a remarkable development, and have carried it to such an extreme that they say that within a few years we're going to land on our office buildings and possibly take an elevator down to our floor.

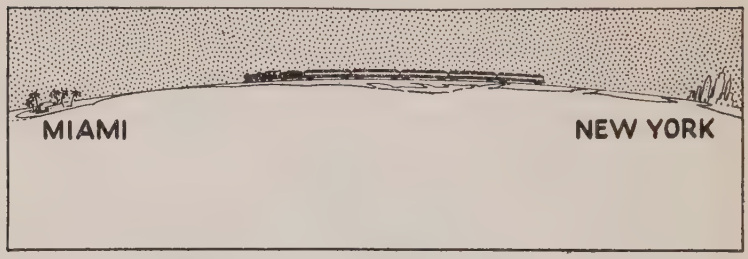
MR. KAEMPFFERT: Well, why not, Patterson? That's not a wild-eyed dream to me. I see no reason why the top floors of a properly constructed office building should not be given over to housing the helicopters. You could fly off to work in the morning from your home and back yard and land on the roof of your office building; and from that roof fly back to your home in the evening.

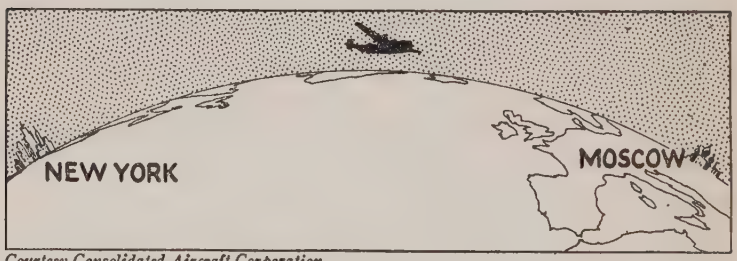
MR. WIRTH: The plans that I have seen of the English cities that are to be rebuilt after the war, and some of our American cities, make no wild speculations about the use of the helicopter. They do, however, agree that we need to have more airports and that we need better technical facilities in the airports. They agree, also, that we'll have to have better transportation from the airports to where people actually want to go and that we may need enormous freight airports that we don't have as yet.

MR. KAEMPFFERT: You put your finger on the point, really. Our airports now lie far too far out of the city. The St. Louis airport, for instance, is seventeen miles from the business district; Los Angeles, fifteen miles; and the average for the country is about seven and a half miles. That's entirely too far.

MR. WIRTH: I think, gentlemen, that we're agreed, then, that in reconstructing cities we have to start with what we've now got

HOW LONG DOES IT TAKE?*





Courtesy Consolidated Aircraft Corporation

* Today it takes less time to travel from New York to Moscow by plane than from New York to Miami by train.

and that there certainly will be tremendous developments but that technically, at any rate, we can't foresee all of them.

MR. KAEMPFFERT: Don't forget that the automobile had its limitations in the beginning. The automobile has to have fine concrete roads to run on, and they had to be built. So, we're facing nothing technologically impossible in demanding better airports. That's part of the technological picture.

MR. WIRTH: It may be that people will live more dispersed over the countryside than they do now.

MR. KAEMPFFERT: I think so.

MR. WIRTH: Gentlemen, before we close this discussion, since today is the last day of Brotherhood Week which is being celebrated in the churches and community houses all over the nation,

we ought to consider the airplane in its implications for the world at large. What kind of a world will we live in, in the future, because the airplane has come into it?

MR. KAEMPFFERT: I was reading, the other day, a Canadian explorer's account of his experience in preaviation and postaviation days. Back about 1900, as I remember it, he visited a Canadian Eskimo tribe—a tribe that had never seen a white man. They were living in the Stone Age. They used crude implements, made largely of walrus bone. He came there again in 1935, and what did he find? These very people had outboard motors; they had sewing machines and kerosene lamps; and some of the women were even wearing corsets. That is what is going to happen all over the world. We'll have a technological leveling and a standardization of life all over the world. People will dress more alike, eat the same canned foods, and think pretty much alike.

MR. WIRTH: You may remember, Kaempffert, that Colonel Colt in inventing the six-shooter spoke of it as the "great equalizer" among men. Do you think that the airplane is going to be a great equalizer among cultures all over the world?

MR. KAEMPFFERT: Yes. What Colonel Colt said was something like Carlyle's famous expression that "gunpowder made men all the same height." These facilities—communication and transportation—standardize thinking, behavior, and outlook and will make men alike.

MR. PATTERSON: I believe that we have a very definite pattern that we can look at today in South America. I believe that you've made a great study of what the airplane has done in developing natural resources in South America that probably never could have been developed by the surface transportation and at a terrific saving in time.

MR. KAEMPFFERT: Quite true, Patterson. You find communities there that are getting all their furniture, all their building material, everything they need, by the airplane. What happens, then, is that

the railway comes in after the community is built up, and progress then continues.

MR. PATTERSON: I think that we're all in agreement on what the developments are and what the potentials are, but one thing that puzzles me, as a practical businessman, is this question of sovereignty of the air and the term that we hear today, "freedom of the air."

MR. KAEMPFFERT: I think that we have to define the term. For me freedom of the air means right of innocent passage over any country whatever with the right to carry goods or passengers to that country, subject, of course, to the tariff regulations and other restrictions of the country. However, national business by air should be conducted nationally.

MR. WIRTH: It would include, also, the right of free landing and the right of the facilities?

MR. KAEMPFFERT: Everything—the subport duties, whatever they may be, and airport duties—we'd pay. But we should be able to go anywhere, any time, with anything on the plane.

MR. PATTERSON: I wonder, however, if there are not many other problems and principles that have to be settled around the peace table before we can determine whether or not we want this freedom of the air, and whether it's good for us or good for the world.

MR. KAEMPFFERT: I look at it as entirely social. What is the social future of the airplane? How can we make the utmost use of it socially? Unless we use the airplane that way, we'll simply have the same old diplomatic jockeying for rights and nationalistic interests.

MR. WIRTH: We've got to control it, don't we, even if we want to prevent another country from importing its diseases into our country?

MR. KAEMPFFERT: That's a health regulation which we must accept.

MR. PATTERSON: That's a health regulation, but I do feel that there are many other things to be settled before we can definitely decide on that policy.

MR. WIRTH: But you would agree, would you not, that we have found that the airplane is increasing man's capacity to move swiftly and to move cheaply and that it is giving us a new conception of the world—a globe—and a cosmopolitan outlook?

For instance, the conference at Casablanca between the President of the United States and the Prime Minister of Great Britain was a world event. They could meet at a given place and exchange personal views.

Just as gunpowder leveled the city walls, so the airplane has the potentiality of overriding national boundaries. The question of freedom of the air depends upon whether we want to fly anywhere in the world and want to let other people fly in the same way. It has made the islands of the world very important. In order to get the full benefit of the airplane, we must have a world organization which will bring its benefits to all mankind.

The ROUND TABLE, *oldest educational program continuously on the air, is broadcast entirely without script, although participants meet in advance, prepare a topical outline, and exchange data and views. The opinion of each speaker is his own and in no way involves the responsibility of either the University of Chicago or the National Broadcasting Company. The supplementary information in this transcript has been developed by staff research and is not to be considered as representing the opinions of the* ROUND TABLE *speakers.*

THE UNIVERSITY OF CHICAGO ROUND TABLE

The University of Chicago ROUND TABLE, the oldest educational program continuously on the air, this month celebrates its twelfth anniversary. The ROUND TABLE is distinguished from other educational programs on the air by being a University-sponsored and University-managed broadcast. Its speakers are University of Chicago professors and their special guests who are invited as experts in the various fields of learning from other leading educational institutions.

The ROUND TABLE was first heard in 1931 over a local Chicago station, WMAQ. In 1933 the ROUND TABLE became a public service program of the National Broadcasting Company and has remained as an N.B.C. feature since that time. With a network of approximately 114 stations, the ROUND TABLE has a regular audience of over ten million listeners. It has become one of the oldest programs on the air and boasts the largest audience and distribution of any education broadcast, having an audience estimated as almost twice as large as the combined audiences of its two nearest competitors.

Planned as a program to forward democracy, the ROUND TABLE has traditionally sought to provide exchange and balance of opinions on fundamental questions affecting the United States. As it now enters its second year of wartime broadcasting, the ROUND TABLE has the distinction of being classified as one of N.B.C.'s "priority war programs." Fifty-one of the sixty ROUND TABLE broadcasts since Pearl Harbor have been specifically related to the war effort and the preservation of democracy. Six of last year's programs were scheduled at specific government request, and many others were suggested by various governmental agencies. Approximately forty programs have been broadcast to assist in clarifying issues which the Office of War Information has declared to be important. High government officials, closely associated with the war effort, have appeared as ROUND TABLE participants—Thurman Arnold, General Lewis B. Hershey, Archibald MacLeish, Byron Price, James Landis, as well as fourteen other representatives of war agencies.

The ROUND TABLE looks forward to its thirteenth year of broadcasting as an educational program in the role of stating, clarifying, and defining the problems and issues facing America, and the world, in its second year of war.

TEST YOUR *Reader's Quotient*

This test will enable you to judge your grasp of the ROUND TABLE *discussion.* *Turn to page 26 to check your answers.*

1. What is the transatlantic record for an airplane? In how many hours is it possible by airplane to reach any point on earth?
2. How many daily trips would planes of one-hundred-and-fifty-passenger capacity have to make to transport two hundred thousand people a year across the Atlantic?
3. How much per mile is the present cost of passenger travel?
4. What is the railroad estimate of the number of tons yearly that might be carried by air express? How many times greater is this than the air-express business in 1941?
5. How many pilots are being trained now?
6. What is the comparative cost of moving 6,400 tons by steamer and by air from San Francisco to Australia?
7. How does the total amount of cargo and passengers carried by air compare to that total carried by surface transportation?
8. What is the average distance from the business districts of American cities to the airports?

More on This Topic

"Air Lines of the Future: Our Stake in Coming Boom," *United States News*, February 12, 1943. *Reports that the government favors a policy of international cooperation in aviation development.*

ELLIOTT, WILLIAM Y., "The Strategy of Air Power," *Yale Review*, winter, 1943. *The limiting consideration of fuel supply is examined.*

SIKORSKY, IGOR, "The Coming Air Age," *Atlantic Monthly*, September, 1942. *Describes why the helicopter may attain the same wide use as the automobile.*

"Technology and Postwar Life," *Fortune*, December, 1942. *In this supplement the potentialities of the air age are considered.*

WALLACE, HENRY A., "What We Will Get Out of the War," *American*, March, 1942. *Says "the establishment of a network of globe-girdling airways ought to be the very first order of business" in the peace and that the large airports should be internationalized.*

"What's in It for the U.S.?" *Time*, February 15, 1943. *Should the United States adopt a policy of unqualified freedom of the air?*

"World Airways: Control of Bases Nub of Rivalry Shaping Up as Powers Scan Postwar Prospects," *Newsweek*, March 1, 1943. *A review of the international rivalries in the field of air transport.*

The People Say . . . .

The following letters are representative of the views expressed by the ROUND TABLE *audience on "Russia as an Ally in War and Peace," broadcast February 21, 1943.*

*

Not a Complicated Problem

I listened very carefully to your last Sunday's discussion, and I chuckled inwardly at your conscious and intentional use of confusing verbiage and circumlocution, calculated to make a most simple problem unnecessarily complex and intricate. Let me assure you, learned dons and professors, that there is nothing obscure or complicated about the aims or purposes of the Soviet Union. It has shown beyond doubt that it is bitterly and irreconcilably opposed to any schemes of conquest or to any forcible imposition of any ideologies upon an unwilling people. I am sure that in this you are just as convinced as I am. What really seems to bother you and which caused all that verbiage and confusion on your part is the wishful thinking that perhaps England and America may prevail upon the Soviets to permit the initial insinuation of the capitalist paw within the Soviet borders. . . . .—*A listener from Los Angeles, California*

*

Do Not Want Spread of Communism

. . . . I have no phobia on the subject, but I feel that it is far wiser to recognize realistically that Stalin and the Russian form of government do not represent *democracy* and the civil liberties. Though we should be glad to see them pursue their experiment in Russia, we should not be a party to any *spread* of such *lack* of democracy through their participation in peace plans for the rest of the world.

I wish sometime that some of you would explain why Stalin's dictatorship is treated with so much more sympathy than others. . . . .—*A listener from Santa Barbara, California*

*

Unrest Fomented by Oppression

Your discussion on Russia yesterday was most interesting. . . . . The views expressed coincide with many I believe in. However we view communism, is it not the outgrowth of a previous system—such as the regime of the Czar? Dies Committees, notwithstanding, unless the basic groundwork of discontent and maladministration is removed, the cancer will grow and communism result in any country. . . . . Few are willing to admit that unrest is fomented by oppression—whether it be that of a government or that of uncontrolled capital bearing

down on labor. . . . .—*A listener from Orlando, Florida*

*

Communism—An Economic, Not a Political, System

While listening to the ROUND TABLE discussion today, it came to my mind that if you would choose as one of your topics, "Communism, What Is It?" and bring out clearly that it is an economic system, not a political system, that it might go a long way toward disarming the potential troublemakers, the big, reactionary capitalists, and all the smaller ones associated with them. If they are allowed to go on unanswered in their propaganda, they may so alienate Russia from Britain and the United States as to make impossible the adoption and maintenance of a satisfactory world peace. That they are at work launching such propaganda is evident from the frequent mention of communism as something to be feared and avoided and by the continuation of such a political excrescence as the Dies Committee in Congress. . . . .—*A listener from Cliftondale, Massachusetts*

*

Baltics May Want To Stay with Russia

. . . . In regard to the future of the Baltic States, you seem to assume that if these peoples are given free choice, they will stay outside the Soviet Union. Is there not a strong possibility, if not a probability, that the masses of these peoples will prefer incorporation into the Soviet Union? Is it not possible, or even probable, that the very self-appointed spokesmen now in exile may represent only privileged-class minorities of Fascist or quasi-Fascist sympathies? For, after all, the Soviet Union is not, like Germany, a government with one master-nationality to which all other nationalities are required to be subservient but, on the contrary, a government of many equally privileged nationalities. . . . . *A listener from Cleveland, Ohio*

ANSWERS TO R.Q. TEST ON PAGE 23

1. 6½ hours. 48 hours.
2. Four trips.
3. Five cents per mile.
4. Twenty-one million tons. Two thousand times greater.
5. 250,000 pilots.
6. $120,000 by steamer and $25,000,000 by air.
7. 2/100 of 1 per cent.
8. 7½ miles.

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186. *Anti-Semitism*
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195. *Canada: Neighbor at War*
198. *What Does Rationing Mean?*

1942

199. *Morale: Ours and Theirs*
201. *Censorship*
203. *Are We Overconfident?*
204. *Labor Policies in Wartime*
207. *Propaganda: Good and Bad*
208. *Civilian Defense*
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215. *War and the Family*
218. *Radio in Wartime*
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231. *Economic Requisites of a Durable Peace*

No.

232. *Challenge of the Four Freedoms*
233. *Health in Wartime*
234. *Wage Policy in Wartime*
235. *The Rubber Crisis*
237. *Congress and the War*
238. *Your Taxes*
239. *The Rediscovery of America*
240. *The Press*
241. *Manpower*
242. *The New Congress*
243. *France*
244. *Crisis Administration*
245. *The Challenge to Local Government*
246. *After One Year of War—What Have We Learned?*
247. *Italy*
248. *Social Security: Challenge to Democracy*
249. *Woodrow Wilson: Prophet or Visionary*

1943

250. *Things To Come: How Science May Shape the Next Twenty-five Years*
251. *1943—Challenge to the Republican Party*
252. *Are We Well Informed?*
253. *Behind the Labor Crisis*
254. *American Foreign Policy: Principle versus Expediency*
255. *The Farmer and Victory*
256. *Germany: Its Education and Re-education*
257. *Russia as an Ally in War and Peace.* February 21

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ROUND TABLE NETWORK OF 114 STATIONS

2:00 P.M. EASTERN WAR TIME

City	Call Letters	Kilocycles	City	Call Letters	Kilocycles
Allentown, Pa.	WSAN	1470	Martinsville, Va.	WMVA	1450
Altoona, Pa.	WFBG	1340	Miami, Fla.	WIOD	610
Asheville, N.C.	WISE	1400	New York, N.Y.	WEAF	660
Atlanta, Ga.	WSB	750	Norfolk, Va.	WTAR	790
Bluefield, W.Va.	WHIS	1440	Philadelphia, Pa.	KYW	1060
Boston, Mass.	WBZ	1030	Pittsburgh, Pa.	KDKA	1020
Charleston, S.C.	WTMA	1250	Portland, Me.	WCSH	970
Charleston, W.Va.	WGKV	1490	Providence, R.I.	WJAR	920
Charlotte, N.C.	WSOC	1240	Raleigh, N.C.	WPTF	680
Cincinnati, Ohio	WLW	700	Reading, Pa.	WEEU	850
Clarksburg, W.Va.	WBLK	1400	Richmond, Va.	WMBG	1380
Cleveland, Ohio	WTAM	1100	Rochester, N.Y.	WHAM	1180
Columbia, S.C.	WIS	560	Savannah, Ga.	WSAV	1340
Detroit, Mich.	WWJ	950	Springfield, Mass.	WBZA	1030
Florence, S.C.	WOLS	1230	Springfield, Ohio	WIZE	1340
Grand Rapids, Mich.	WOOD	1300	Syracuse, N.Y.	WSYR	570
Greenville, S.C.	WFBC	1330	Tampa, Fla.	WFLA	970
Greenwood, S.C.	WCRS	1450	Toledo, Ohio	WSPD	740
Jacksonville, Fla.	WJAX	930	Washington, D.C.	WRC	980
Johnstown, Pa.	WJAC	1400	Williamsport, Pa.	WRAK	1400
Harrisburg, Pa.	WKBO	1230	Wilmington, Del.	WDEL	1150
Lakeland, Fla	WLAK	1340	Winston-Salem, N.C.	WSJS	600
Lima, Ohio	WLOK	1240	York, Pa.	WORK	1350

1:00 P.M. CENTRAL WAR TIME

Birmingham, Ala.	WBRC	960	Louisville, Ky.	WAVE	970
Bismarck, N.D.	KFYR	550	Madison, Wis.	WIBA	1310
Chicago, Ill.	WMAQ	670	Mankato, Minn.	KYSM	1230
Dallas, Texas	WFAA	820	Memphis, Tenn.	WMC	790
Des Moines, Iowa	WHO	1040	Mobile, Ala.	WALA	1410
Duluth, Minn., and Superior, Wis.	WEBC	1320	Montgomery, Ala.	WSFA	1440
Eau Claire, Wis.	WEAU	1070	Nashville, Tenn.	WSM	650
El Paso, Texas	KSTM	1380	New Orleans, La.	WSMB	1350
Evansville, Ind.	WGBF	1280	Oklahoma City, Okla.	WKY	930
Fargo, N.D.	WDAY	970	Omaha, Neb.	WOW	590
Fort Wayne, Ind.	WOWO	1190	Rochester, Minn.	KROC	1340
Hattiesburg, Miss.	WFOR	1400	St. Cloud, Minn.	KFAM	1450
Hibbing, Minn.	WMFG	1240	Shreveport, La.	KTBS	1480
Houston, Texas	KPRC	950	Sioux Falls, S.D.	KSOO	1140
Indianapolis, Ind.	WIRE	1430	Springfield, Mo.	KGBX	1260
Kansas City, Mo.	WDAF	610	Terre Haute, Ind.	WBOW	1230
Kingsport, Tenn.	WKPT	1400	Tulsa, Okla.	KVOO	1170
La Crosse, Wis.	WKBH	1410	Virginia, Minn.	WHLB	1400
Little Rock, Ark.	KARK	920	Wichita, Kan.	KANS	1240

12:00 M. MOUNTAIN WAR TIME

Albuquerque, N.M.	KOB	1030	Phoenix, Ariz.	KTAR	620
Billings, Mont.	KGHL	790	Pocatello, Ida.	KSEI	930
Boise, Ida.	KIDO	1380	Safford, Ariz.	KGLU	1450
Bozeman, Mont.	KRBM	1450	Salt Lake City, Utah	KDYL	1320
Butte, Mont.	KGIR	1370	Tucson, Ariz.	KVOA	1290
Denver, Colo.	KOA	850	Twin Falls, Ida.	KTFI	1270
Helena, Mont.	KPFA	1240	Yuma, Ariz.	KYUM	1240

11:00 A.M. PACIFIC WAR TIME

Bakersfield, Cal.	KERN	1410	Sacramento, Cal.	KFBK	1530
Fresno, Cal.	KMJ	580	San Diego, Cal.	KFSD	600
Los Angeles, Cal.	KFI	640	San Francisco, Cal.	KPO	680
Medford, Ore.	KMED	1440	Seattle, Wash.	KOMO	950
Portland, Ore.	KGW	620	Spokane, Wash.	KHQ	590

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MARCH 7, 1943

BIGGER AND BETTER TAXES?

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SUGGESTED READINGS

"Confusion over Taxes," *United States News*, February 12, 1943.

"$51,000,000,000-a-Year-Man," *Time*, January 25, 1943.

RAYBACK, JOSEPH G., "The Strange Story of the Tax Bill," *Current History*, December, 1942.

SOULE, GEORGE, "Total Taxes for Total War," *New Republic*, February 15, 1943.

WEINSTEIN, JEROME, "How To Pay as You Go with or without the Ruml Plan," *Nation*, February 20, 1943.

[PRINTED IN U.S.A.]